

## ABSTRACT

### VALIDATION OF ATOMIC ABSORPTION SPECTROPHOTOMETRY METHOD FOR COPPER (Cu) DETERMINATION IN MULTIVITAMIN-MINERAL TABLET

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An atomic absorption spectrophotometry has been validated to determine copper in multivitamin-mineral tablet. This method fulfilled the requirement of validation parameter (selectivity, linearity, accuracy and precision). Dry destruction was used as preparation sample procedure to wipe out the matrices of organic compound. The method showed a good linearity with  $r$  value  $\geq 0.999$  in range 0.5 - 4.0 ppm. The recoveries of copper were 99.94%; 99.74% and 101.64% for 80%, 100% and 120% respectively. Variance of repeatability and intermediate precision were 0.57 and 2.88. By statistic test ( $\alpha = 0.05$ ), both of accuracy and precision were indicated as high values. The method was successfully applied copper (Cu) determination in multivitamin-mineral tablet.

**Keywords:** validation method, copper, AAS, multivitamin mineral tablet.